Profiles™
Financial Planning Application

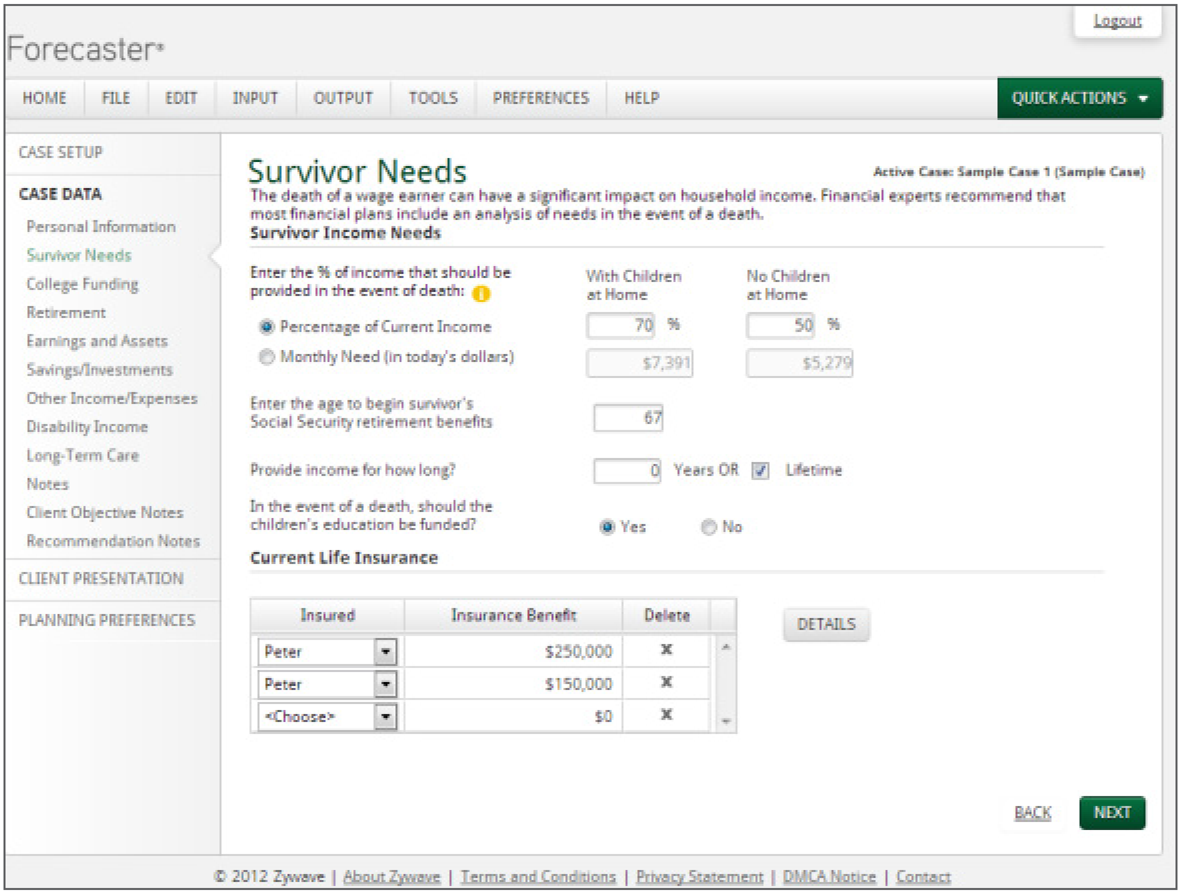
FUNCTIONAL DOCUMENT

Analyzing Survivor Needs

Profiles™ Forecaster☑

FUNCTIONS ADDRESSED IN THIS DOCUMENT:

- How do planning preferences affect survivor needs and address the immediate cash needs in the event of death?
- Using the Survivor Needs screen, how can ongoing survivor needs in the event of death be modeled?



Case Data category—Survivor Needs screen

When you are analyzing survivor needs in the event of death, it is important to consider both immediate cash needs at death and the ongoing needs of the survivor; Profiles Forecaster addresses both these needs. When analyzing survivor needs, Profiles™ calculates the present value of all income needs and compares that to the present value of income sources, and then to current assets, and life insurance. When doing so, Profiles™ assumes a capital depletion method, which depletes available assets and life insurance policies throughout the life of the survivor and assumes that the survivor, if employed, continues to work. If survivor needs cannot be met with these resources, Forecaster recommends additional insurance or capital.

How do planning preferences affect survivor needs and address immediate cash needs in the event of death?

On the ***Planning Preferences*** screen, Profiles™ includes default assumption values which are used as the basis for many calculations; a number of these preferences directly affect immediate cash needs, while others affect ongoing survivor needs.

Because these assumptions may not apply to each user or each case, Profiles™ offers two methods to adjust these preferences. When using the first method, entering alternative values on the ***Planning Preferences*** screen under ***Defaults for New Plans***, the changes will apply to all new plans. In contrast, if the changes should only apply to the current plan, enter your changes in the fields under ***Used for Current Plan***. Any preferences entered under ***Used for Current Plan*** will override those entered under ***Defaults for New Plans***, but only for the current plan.

While nine ***Planning Preferences*** are available, the focus here will be on those preferences that are of particular importance to survivor needs, and further, whether they affect immediate cash needs or ongoing needs of the survivor in the event of death.

The first planning preference that is particularly important to ongoing survivor needs is ***What rate of return on assets should be assumed: In the event of a death?***. This is used as the discount rate when solving for capitalized values throughout the analysis using net present value calculations. When you override the default value, it is important to remember that entering a lower or more conservative rate of return will increase the capitalized values, while entering a higher or more aggressive rate of return will decrease the capitalized values.

The next one, ***How many years should a rent fund provide?***, again applies to ongoing survivor needs in cases where the clients do not own a home. It allows the survivor to set aside an adequate reserve of money to cover rent for a specific number of years or, alternatively, to fund a down payment on a home.

In contrast, the next applicable preference, ***How many months income should be set aside for emergency reserves?***, affects immediate cash needs. Using the number of months of income specified in this field, Profiles™ includes an emergency fund value that is intended to be set aside for the survivor in the event of death and, in most cases, to be used to cover cash flow interruptions such as the gap between the deceased’s last pay and the receipt of proceeds.

Inflation can significantly affect any aspect of a financial plan. In the event of death, the survivor is often not able to adequately address some of the effects, in particular, changes in purchasing power. Therefore, greater consideration is often required when analyzing survivor needs. For this reason, the next two preferences are particularly important to ongoing survivor needs. The first one of these, What long-term inflation rate should be used?, applies to entries such as salaries. The second, What inflation rate should be used for Social Security?, applies to Social Security income calculated by Profiles™ (it does not apply to Social Security entered on the ***Other Income Sources*** screen).

Next, **What should the assumed life expectancy be?** affects ongoing survivor income needs as it allows you to specify an end age for the analysis. When making assumptions for your clients’ financial plan including survivor needs, it is often a good idea to assume a long life expectancy to ensure resources are not outlived.

The last applicable planning preference, ***What should be assumed for final expenses?***, is included directly in immediate cash needs and is intended to capture expenses such as burial costs and final medical expenses.

While immediate cash needs include final expenses, education, debt payments, and emergency reserves, only final expenses and emergency reserves are addressed using planning preferences. In contrast, for debt payments, Forecaster pays off all liabilities immediately in the event of death. In addition, in cases where the ***College Funding*** module has been selected on the ***Case Setup*** screen and college funding needs have been added to the case, by default Profiles™ includes in immediate cash needs the amount needed to fund each child's education goal. To override the default, refer to the ***In the event of a death, should the children's education be funded?*** field on the ***Survivor Needs*** screen.

To understand how planning preferences affect immediate cash needs, as well as how Profiles™ calculates survivor needs, we will look at a case for Paul and Amanda, starting with the ***Financial Needs in the Event of Paul's Death*** report (available by clicking the ***Survivor Needs*** category in the ***Client Presentation*** dialog box).

Example: Paul and Amanda are both 40 years old and have a young son, Brent. Their combined annual income is $100,000; Paul earns $60,000 annually and Amanda earns $40,000. In addition to a mortgage with an outstanding balance of $197,596, they have a personal loan with a balance of $12,000. Paul and Amanda feel that the default survivor needs assumptions meet their needs, in the event that either of them was to die; that is, they would like to be able to meet income needs at 70% while Brent is at home and 50% throughout the remainder of the survivor's lifetime. In addition to each having a 401(k) account, to meet their needs in the event of death, Paul and Amanda each have a whole life policy; Paul's has an insurance benefit of $250,000 and Amanda's is $150,000.

Looking towards the top of the report page, we can see that Profiles™ has calculated ***Total Immediate Cash Needs*** of $244,596, which includes final expenses, debt payments, and emergency funds.

The first value, ***Final Expenses Fund***, comes directly from the similarly named field on the ***Planning Preferences*** screen. The next item, ***Debt Payment Fund***, reflects the sum of the liability amounts under ***Assets and Liabilities*** on the ***Earnings and Assets*** screen, including the mortgage, credit cards and personal loans, and any additional liabilities.

Lastly, the ***Emergency Fund*** value is calculated based on the clients' monthly income as well as the value entered in the ***How many months income should be set aside for emergency reserves?*** field on the ***Planning Preferences*** screen.

Using the Survivor Needs screen, how can ongoing survivor needs in the event of death be modeled?

While the ***Planning Preferences*** screen primarily addresses immediate cash needs, the ongoing income needs of the survivor can be addressed on the ***Survivor Needs*** screen (accessible from the ***Case Data*** category after selecting the ***Needs in the Event of Death*** option on the ***Case Setup*** screen).

To reduce the financial hardship associated with the death of an income earner, the ***Survivor Needs*** screen includes a default monthly income need of 70% while the survivor has children at home (assumed to be to age 18), which declines to 50% throughout the survivor's remaining life expectancy. In addition, to protect the survivor's income against inflation, by default Profiles™ increases the income need for each period by the long-term inflation rate value specified on the ***Planning Preferences*** screen.

As individual needs will vary, the ***Survivor Needs*** screen allows changes to both percentages. By default, Profiles™ assumes that the income needs last until the life expectancy specified on the ***Planning Preferences*** screen. In cases where the survivor's income needs will only apply for a specific number of years, this can also be specified on the ***Survivor Needs*** screen.

DID YOU KNOW? For a single client with dependents, in addition to funding education goals, Profiles™ includes by default an income need of 70% until the youngest child is 18 years old.

After using the ***Financial Needs in the Event of Paul's Death*** report to reconcile the ***Total Immediate Cash Needs*** amount, we will use the adjacent ***Survivor Needs Analysis Detail*** report to understand both ongoing survivor needs and the additional capital needed. In the case of Paul and Amanda, we can see that in the event of Paul's death, Amanda would need additional capital of $566,465.

The first capitalized value, ***Total Capital Needed to Provide Income Objective***, represents the net present value of the surviving client's income needs both while children are at home and throughout the remainder of the survivorship period; by default, this is the survivor's remaining life expectancy. Explained another way, this is the amount the survivor would need to have invested into an account earning the survivor's rate of return to meet each need.

While the ***Total Capital Needed to Provide Income Objective*** amount reflects the amount that would need to be invested in order to meet survivor needs assuming no other resources exist, most clients receive some type of survivor income, often Social Security, which reduces this amount. In addition, when analyzing survivor needs, Profiles™ assumes that the survivor, if employed, continues to earn an income.

Survivor Needs Analysis Detail
In the Event of Paul's Death

Assumptions	
Income Replacement % of Total Household Income with Dependents	70%
Income Replacement % of Total Household Income without Dependents	50%
Inflation	4.00%
Survivor Rate of Return	6.00%
Amanda's Mortality	90

Income Objective

Amanda's Age	Income Need %	Annual Need (Today's Dollars)	Annual Need (Future Dollars)	Capital Value
40	70%	$70,000	$70,000	$682,933
51	50%	50,000	76,973	1,097,124
Total Capital Needed to Provide Income Objective				**$1,780,057**

Income Sources

Amanda's Income Sources	Payment In Today's Dollars	From	To	COLA	First Year's Payment	Capital Value
Employment	$40,000	40	65	4.00%	$40,000	$782,135
Social Security	21,090	40	90	2.50%	21,090	326,054
Total Income Sources						**$1,108,189**

Capital Needed to Meet Income Goals	**$671,868**

Immediate Cash Needs		
Final Expenses		$10,000
Debt Payment Fund		$209,596
Mortgage	197,596	
Other Liabilities	12,000	
Emergency Reserve Fund		$25,000
Total Immediate Cash Needs		**$244,596**

Total Capital Needed to Meet Objectives	**$916,465**

Capital Available

Account Name/ Asset Name	Market Value
Surplus Account	
Amanda's 401(k)	$30,000
Paul's 401(k)	70,000
Life Insurance	250,000
Total Capital Available	**$350,000**

Additional Capital Needed to Meet Objectives	**$566,465**

Income Objective

Amanda's Age	Income Need %	Annual Need (Today's Dollars)	Annual Need (Future Dollars)	Capital Value
40	70%	$70,000	$70,000	$682,933
51	50%	50,000	76,973	1,097,124
Total Capital Needed to Provide Income Objective				**$1,780,057**

As we can see under *Annual Need (Today's Dollars)*, as Paul and Amanda's annual income is $100,000, Forecaster has included an annual need of $70,000 starting at age 40, which reduces to $50,000 (or 50%) when Brent turns 18.

The amount shown under *Annual Need (Future Dollars)* at age 51 represents the future value of $50,000 indexed for inflation at 4%.

In order to meet her income needs while Brent is at home, Amanda would need to have $682,933 invested into an account earning 6%.

In addition, to meet her income needs throughout the remainder of her life expectancy, she would need to have $1,097,124 invested.

Under Income Sources, Profiles™ begins by providing a detailed listing of the incomes during survivorship. In addition, for the ***Capital Value*** or ***Total Income Sources*** amounts, Profiles™ again uses net present value to calculate the amount that would need to be invested into an account to replace the income source.

Income Sources

Amanda's Income Sources	Payment In Today's Dollars	From	To	COLA	First Year's Payment	Capital Value
Employment	$40,000	40	65	4.00%	$40,000	$782,135
Social Security	21,090	40	90	2.50%	21,090	326,054
Total Income Sources						**$1,108,189**

The *Total Income Sources* value represents the amount that would need to be invested into an account earning 6% (survivor's return rate) to replace both Amanda's employment income as well as the Social Security income.

Because ***Total Income Sources*** provide income to the survivor, less would need to be invested into an account to meet survivor needs. This reduced amount is shown in the next section as ***Capital Needed to Meet Income Goals*** and is simply the ***Total Capital Needed to Provide Income Objective*** less the ***Total Income Sources*** amount.

In the case of Paul and Amanda, the resulting amount of $671,868 ($1,780,057 – $1,108,189) would need to be invested to meet Amanda's ongoing income needs in the event of Paul's death.

As Profiles™ uses net present value calculations to determine the amount that would need to be invested into an account to meet the survivor's ongoing income needs and replace survivor income sources, it is important to understand how these calculations are performed.

While all cash flows—including incomes and withdrawals—are assumed to occur at the beginning of each month, it is important to recognize that applicable cash flows are only indexed for inflation once a year. In addition, while calculated on a monthly basis, the rate of return is not compounded monthly. Instead, Profiles™ converts it to a monthly return as follows:

Monthly Average Rate of Return:	In this case:
$(1 + i)^{(1/12)} - 1$	$(1 + 0.04)^{(1/12)} - 1 = 0.3274\%$

As discussed previously, the subsequent section of the report—***Total Immediate Cash Needs—***primarily reflects the values entered on the ***Planning Preferences*** screen, and in the case of Paul and Amanda, this amount is $244,596.

DID YOU KNOW? Because Profiles™ requires an account in which to accumulate surplus income, if the case data does not include a bank or investment account, Profiles™ creates a bank account asset called ***Surplus Account*** to handle any surplus savings.

The next amount, ***Total Capital Available***, reflects the market value of the assets owned by the clients, as well as proceeds of life insurance policies insuring the deceased.

The final and most important value is ***Additional Capital Needed to Meet Objectives***, because this represents the additional capital (likely new life insurance) required to meet the survivor's needs. This amount represents the difference between ***Total Capital Needed to Meet Objectives*** and ***Total Capital Available***. In the case of Paul and Amanda, we can see in the ***Survivor Needs Analysis Detail*** report shown previously that, in order for Amanda to meet her income needs in the event of Paul's death, she would need additional capital of $566,465.

Lastly, while the two sample reports used in this document are often sufficient to address survivorship needs, in cases where the clients are more analytical or prefer more numbers-oriented reports, the ***Survivor Needs Analysis Timeline*** report is available to meet that need. Assuming that the survivor only has his or her existing capital, that is, that the additional capital needed has not been obtained, this report provides a yearly analysis of the survivor's cash flow in the event of death.

Because planning for survivor needs is one of the focuses of most financial plans, Profiles™ simplifies planning for survivor needs in the event of death by systematically comparing the survivor's needs to their available survivor income sources, and then to capital available.